Table 1. Areal distribution of habitat features at the Arkema Site.

				Riparian '	Vegetated	ACM SI	ope <5:1	ACM SI	ope>5:1	Struc	tures	Pili	ngs
SCA	SCMA	Habitat Feature	Total Acres	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
SCA-1	Saltpad area	active channel margin	0.80			0.42	52.6%	0.38	47.4%	0.02	2.9%		
SCA-1	Saltpad area	main channel deep	0.94										
SCA-1	Saltpad area	main channel shallow 0-10 ft below OLW	0.51							0.02	3.0%		
SCA-1	Saltpad area	main channel shallow 10-20 below OLW	0.46							0.07	16.0%		
SCA-1	Saltpad area	upland riparian	6.16	0.76	12.4%								
		Total	8.86	0.76	12.4%	0.42	52.6%	0.38	47.4%	0.11	21.9%	0.00	0.0%
SCA-2	Dock 1 and 2 area	active channel margin	1.51			0.96	64.0%	0.53	35.5%	0.12	8.2%		
SCA-2	Dock 1 and 2 area	main channel deep	1.52										
SCA-2	Dock 1 and 2 area	main channel shallow 0-10 ft below OLW	1.48							0.21	14.1%		
SCA-2	Dock 1 and 2 area	main channel shallow 10-20 below OLW	0.67							0.31	46.3%		
SCA-2	Dock 1 and 2 area	upland riparian	8.41	0.94	11.2%								
		Total	13.58	0.94	11.2%	0.96	64.0%	0.53	35.5%	0.64	68.6%	0.00	0.0%
SCA-3	Lot 3 area	active channel margin	1.83			1.63	89.2%	0.20	10.8%				
SCA-3	Lot 3 area	main channel deep	0.94										
SCA-3	Lot 3 area	main channel shallow 0-10 ft below OLW	1.50							0.04	2.6%	0.02	1.5%
SCA-3	Lot 3 area	main channel shallow 10-20 below OLW	0.88							0.05	5.3%		
SCA-3	Lot 3 area	upland riparian	5.23	0.55	10.5%								
		Total	10.38	0.55	10.5%	1.63	89.2%	0.20	10.8%	0.09	7.9%	0.02	1.5%
SCA-4	Lot 1 and 2 area	active channel margin	4.63			4.33	93.5%	0.29	6.3%			0.39	8.4%
SCA-4	Lot 1 and 2 area	main channel deep	2.70										
SCA-4	Lot 1 and 2 area	main channel shallow 0-10 ft below OLW	2.03									0.26	12.7%
SCA-4	Lot 1 and 2 area	main channel shallow 10-20 below OLW	1.48										
SCA-4	Lot 1 and 2 area	upland riparian	8.68	1.13	13.1%								
		Total	19.53	1.13	13.1%	4.33	93.5%	0.29	6.3%	0.00	0.0%	0.64	21.0%

Table 2. Tentatively identified plants, Arkema salmonid habtitat survey July 6, 2010.

Plant Species	Native/Invasive Status ^a
Bigleaf maple (Acer macrophyllum)	N
Black cottonwood (<i>Populus balsamifera</i>)	N
Common St. Johns Wort (Hypericum anagalloides)	1
Common vetch (Vicia sativa)	1
English daisy (Bellis perennis)	1
English ivy (Hedera helix)	1
Himalayan blackberry (Rubus discolor)	1
Paper birch (Bitula papyrifera)	N
Scotch broom (Cytisus scoparius)	1
Sitka willow (Salix sitchensis)	N
Spring gold (Lomatium utriculatum)	N
small unidentified shrubs	-
Unidentified ferns	-
Unidentified grasses	N _p

^aN = Native, I = Invasive

^bAssumes mixture of native and introduced varieties.

Table 3. Relative abundances of native and invasive plants in the riparian habitat.

		Relative Abundance	ce
	·		Mixed Invasive &
Area	Native Only	Invasive Only	Native
Saltpad	0.0%	23.5%	76.5%
Docks 1&2	0.0%	35.3%	64.7%
Lot 3	0.0%	35.7%	64.3%
Lots 1&2	5.0%	20.0%	75.0%
All Areas	1.5%	27.9%	70.6%

Table 4. Salmonid habitat evaluation for the Salt Pad area.

Value metrics Sloped (<5:1 or 11°), unarmored and vegetated Invasive species present						Saltpad	Baselir	ie	Al	ternative	A		Alternative	В	A	lternative	: C
Mathetic																	
Rigarian C.1.6 Available Acres (Figure 1) Value metrics Value value Value valu	Hobitot	Habitat Charactaristics 1		Calmanid Valua	A												
Value metrics				Salmonia value		Area A	cres	Acres	Area	Acres	Acres	Area	Acres	Acres	Area	Acres	Acres
Naturally wegnetated rices 4, 400 ft from ACM 2	Niparian																
and in the instance floodplain			2	0.5	3	0%	0.00	0.00									
Invasive pacies present Naturally vegetated, grass/shrub 0.2 2 0.05 0.00 0.00 Invasive species present Naturally vegetated grape 0.05 12.0% 0.74 0.04 Vegetated figrap 0 0.05 12.0% 0.74 0.04 Unvegetated flyapved/buildings/riprap 0 0.05 12.0% 0.74 0.04 Unvegetated flyapved/buildings/riprap 0 0.05 12.0% 0.74 0.04 Unvegetated flyapved/buildings/riprap 0 0.05 12.0% 0.05 Value metrics Sloped (%51 or 11"), unarmored and vegetated 0 0 0.00 0.00 Invasive species present Sloped (%51 or 11"), unarmored and vegetated 0.8 0.06 0.00 0.00 Invasive species present 0 0 0 0 0.00 Invasive species present 0 0 0 0 0 0 Invasive species present 0 0 0 0 0 0 0 Invasive species present 0 0 0 0 0 0 0 0 Invasive species present 0 0 0 0 0 0 0 0 0		, -			3												
Naturally wegetated, grass/shruh		·	4			070	0.00	0.00									
and associated with historic floodplain Invasive species present 4 N/A Vegetated rignap 5 0.05 12.0% 0.74 0.04 Receive channel margin 0.80 Available Acres (Figure ES1) Value metrics Sloped (<5.1 or 11"), unarmored and vegetated Invasive species present Sloped (<5.1 or 11"), unarmored and vegetated Invasive species present Sloped (<5.1 or 11"), unarmored and vegetated Invasive species present Sloped (<5.1 or 11"), unarmored and vegetated Invasive species present Sloped (<5.1), inarmored and unwegetated Invasive species present Sloped (<5.1), unarmored and unwegetated Invasive species present Sloped (<5.1), bio-engineered Invasive species present Invasive specie		·			3	0%	0.00	0.00									
Invasive species present 4		, -			3												
Vegetated riprap 0.05 12.0% 0.74 0.04		•	4			070	0.00	0.00									
Unvegetated/paved/buildings/riprap Do 88 0% 5.42 0.00 Total 0.80 Available Acres (Figure ES1) Value metrics Sloped (<5:1 or 11*), unarmored and vegetated 1 3 0% 0.00 0.00 Invasive species present Sloped (>5:1) or 11*), unarmored and vegetated 1 0% 0.00 0.00 Invasive species present Sloped (>5:1), unarmored and unvegetated 0.8 0% 0.00 0.00 Sloped (>5:1), bio-engineered 0.8 0% 0.00 0.00 Sloped (>5:1), bio-engineered 0.8 0% 0.00 0.00 Sloped (>5:1), bio-engineered 0.2 0% 0.00 0.00 Sloped (>5:1), bio-engineered 0.2 0% 0.00 0.00 Sloped (>5:1), bio-engineered 0.2 0% 0.00 0.00 Sloped (>5:1), bio-engineered 0.8 0% 0.00 0.00 S			5			12 0%	0.74	0.04									
Active channel margin																	
Active channel margin Value metrics Sloped (5-51 or 11*), unarmored and vegetated invasive species present Sloped (5-51 or 11*), unarmored and vegetated invasive species present Sloped (5-51), unarmored and unvegetated invasive species present Sloped (5-51), unarmored and unvegetated invasive spec		Onvegetated, paved, buildings, riprap		-	_	00.070											
Value metrics Sloped (>5:1 or 11"), unarmored and vegetated 1 3 0% 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00				. 5 tu			0.10	0.0 .									
Sloped (<5:1 or 11*), unarmored and vegetated Invasive species present Sloped (<5:1) or 11*), unarmored and vegetated Invasive species present Sloped (<5:1), unarmored and unvegetated 0.8 0% 0.00 0.00	Active channel margin																
Invasive species present Sloped (>5:1 or 11"), unarmored and vegetated 10.8 3 0% 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00					,												
Invasive species present Sloped (<5:1), unarmored and unvegetated Sloped (<5:1), unarmored and unvegetated Sloped (<5:1), unarmored and unvegetated Sloped (<5:1), bio-engineered O.2 0% 0.00 0.00 Sloped (<5:1), bio-engineered O.2 0% 0.00 0.00 Riprapped O 97% 0.78 0.00 Sheetpile Pilings O 0 0% 0.00 0.00 Sheetpile Pilings O 0 0% 0.00 0.00 Covered structures over channel margins Total Main channel Shallow Water (0-10 ft below OLW) Value metrics Shallow water, gravel and finer substrate Shallow water, gravel and finer substrate Shallow water with riprap or concrete Shallow water with riprap or concrete Shallow water with ripring structures Shallow water with pilings				1	3	0%	0.00	0.00									
Sloped (>5:1), unarmored and unvegetated 0.1 0% 0.00 0.00				0.8	3	0%	0.00	0.00									
Sloped (<5:1), bio-engineered		Sloped (<5:1), unarmored and unvegetated		0.8		0%	0.00	0.00									
Sloped (>5:1), bio-engineered		Sloped (>5:1), unarmored and unvegetated		0.1		0%	0.00	0.00									
Riprapped 0 97% 0.78 0.00 Sheetpile 0 0% 0.00 0.00 Pilings 6 0 0% 0.00 0.00 Covered structures over channel margins 7 0.1 2.9% 0.02 0.0023 Total 7 0.80 0.00		Sloped (<5:1), bio-engineered		0.2		0%	0.00	0.00									
Sheetpile 0 0 0% 0.00 0.00 Pilings 6 0 0% 0.00 0.00 Covered structures over channel margins 7 0.1 2.9% 0.02 0.0023 Total 0.80 0.0023 Main channel Shallow Water (0-10 ft below OLW) 0.51 Available Acres (Figure ES1) Value metrics Shallow water, gravel and finer substrate 1 97% 0.49 0.49 Shallow water, natural rock outcrop 8 1 0% 0.00 0.00 Shallow water with riprap or concrete 0.1 0% 0.00 0.00 Shallow water with covering structures 7 0.1 3.0% 0.02 0.00 Shallow water with pilings 6 0 0% 0.00 0.00		Sloped (>5:1), bio-engineered		0.2		0%	0.00	0.00									
Pilings 6 0 0 0% 0.00 0.00 Covered structures over channel margins 7 0.1 2.9% 0.02 0.0023 Total 0.80 0.0023 Main channel Shallow Water (0-10 ft below OLW) O.51 Available Acres (Figure ES1) Value metrics Shallow water, gravel and finer substrate 1 97% 0.49 0.49 Shallow water, natural rock outcrop 8 1 0% 0.00 0.00 Shallow water with riprap or concrete 0.1 0% 0.00 0.00 Shallow water with covering structures 7 0.1 3.0% 0.02 0.00 Shallow water with pilings 6 0 0 0% 0.00 0.00		Riprapped		0		97%	0.78	0.00									
Covered structures over channel margins 0 0% 0.00 0.00 Covered structures over channel margins 7 0.1 Total 2.9% 0.02 0.0023 Total 0.80 0.0		Sheetpile		0		0%	0.00	0.00									
Main channel Shallow Water (0-10 ft below OLW) Shallow water, gravel and finer substrate Shallow water, natural rock outcrop Shallow water with riprap or concrete Shallow water with covering structures Shallow water with pilings Shallow water w		Pilings	6	0		0%	0.00	0.00									
Main channel Shallow Water (0-10 ft below OLW) 0.51 Available Acres (Figure ES1) Value metrics Shallow water, gravel and finer substrate Shallow water, natural rock outcrop 8 1 97% 0.49 0.49 Shallow water, natural rock outcrop Shallow water with riprap or concrete 0.1 0% 0.00 0.00 Shallow water with covering structures Shallow water with pilings 6 0 0% 0.00 0.00		Covered structures over channel margins	7	0.1		2.9%	0.02	0.0023									
Shallow Water (0-10 ft below OLW) 0.51 Available Acres (Figure ES1) Value metrics Shallow water, gravel and finer substrate Shallow water, natural rock outcrop Shallow water with riprap or concrete Shallow water with covering structures Allow water with pilings Output				Total			0.80	0.0023									
0.51 Available Acres (Figure ES1) Value metrics Shallow water, gravel and finer substrate Shallow water, natural rock outcrop Shallow water with riprap or concrete Shallow water with covering structures 7 0.1 3.0% 0.00 0.00 Shallow water with pilings 6 0 0 0 0 0 0.00 0.00	Main channel																
0.51 Available Acres (Figure ES1) Value metrics Shallow water, gravel and finer substrate Shallow water, natural rock outcrop Shallow water with riprap or concrete Shallow water with covering structures 7 0.1 3.0% 0.00 0.00 Shallow water with pilings 6 0 0 0 0 0 0.00 0.00	Shallow Water (0-10 f	ft below OLW)															
Shallow water, gravel and finer substrate 1 97% 0.49 Shallow water, natural rock outcrop 8 1 0% 0.00 Shallow water with riprap or concrete 0.1 0% 0.00 Shallow water with covering structures 7 0.1 3.0% 0.02 Shallow water with pilings 6 0 0% 0.00 0.00	·																
Shallow water, natural rock outcrop 8 1 0% 0.00 0.00 Shallow water with riprap or concrete 0.1 0% 0.00 0.00 Shallow water with covering structures 7 0.1 3.0% 0.02 0.00 Shallow water with pilings 6 0 0% 0.00 0.00		Value metrics															
Shallow water with riprap or concrete O.1 O% O.00 O.00 Shallow water with covering structures O.1 O.00 O.00 O.00 Shallow water with pilings O.00		Shallow water, gravel and finer substrate		1		97%	0.49	0.49									
Shallow water with riprap or concrete 0.1 0% 0.00 0.00 Shallow water with covering structures 7 0.1 3.0% 0.02 0.00 Shallow water with pilings 6 0 0% 0.00 0.00		Shallow water, natural rock outcrop	8	1		0%	0.00	0.00									
Shallow water with covering structures $\begin{pmatrix} 7 & 0.1 & 3.0\% & 0.02 & 0.00 \\ 6 & 0 & 0\% & 0.00 & 0.00 \end{pmatrix}$		•		0.1		0%											
Shallow water with pilings 6 0 0% 0.00 0.00			7	0.1													
Total 0.51 0.49			6	0		0%	0.00	0.00									
				Total			0.51	0.49									

Table 4. Salmonid habitat evaluation for the Salt Pad area.

			Salt	pad Baseli	ne	Alt	ernative	Α	А	ternative	В	Al	lternative	e C
			%			%			%			%		
			Available		Value X	Available		Value X	Available		Value X	Available	:	Value X
Habitat	Habitat Characteristics ¹	Salmonid Value	Area	Acres	Acres	Area	Acres	Acres	Area	Acres	Acres	Area	Acres	Acres
Shallow Water (10	-20 ft below OLW)													
	0.46 Available Acres (Figure ES1)		N/	A	NA									
	Value metrics													
	Shallow water, gravel and finer substrate	0.9	84%	6 0.38	0.34									
	Shallow water, natural rock outcrop	8 0.9	0%	6 0.00	0.00									
	Shallow water with riprap or concrete	0.1	0%	6 0.00	0.00									
	Shallow water with covering structures	7 0.1	16%	6 0.07	0.01									
	Shallow water with pilings	6 0	0%	6 0.00	0.00									
		Total		0.46	0.35									
Deep water	0.94 Available Acres (Figure ES1)													
	Value metrics													
	Deep water with natural substrates	0.1	100%	6 0.94	0.09									
	Deep water with artificial substrates	0.05	0%	6 0.00	0.00									
		Total		0.94	0.09									
Off channel	0.00 Available Acres (Figure ES1)													
	Value metrics													
	Cold" water tributary"	1	0%	6 0.00	0.00									
	Warm" water tributary"	0.9	0%	6 0.00	0.00									
	Side channel	1	0%	6 0.00	0.00									
	Alcove or slough with tributary	1	7 0%	6 0.00	0.00									
	Alcove or slough without tributary	0.8	0%	6 0.00	0.00									
	Embayment (cove) with tributary	1	7 0%	6 0.00	0.00									
	Embayment (cove) without tributary	0.8	8 0%	6 0.00	0.00									
		Total		0.00	0.00									

¹ Estimates of relative habitat value herein are interim and subject to change pursuant to future revisions or amendments by NMFS in consultation with the LWG.

² ACM (active channel margin). Naturally vegetated means vegetated by native (i.e., non-invasive) species.

³ Native species. Value is 1/2 the value listed if vegetated with invasive species.

⁴ For example Himalayan blackberry

⁵ Approximately 27% of the area is dominated by invasive species and 73% of the area is comprised of mixed native and invasive species.

 $^{^{6}}$ Evaluated at 1/2 the margin type depending on the location of the pilings.

⁷ For example, docks

⁸ Cannot be created

⁹ Value is 0.9 for salmonid adults if warm" water tributary"

¹⁰ Value is around 0.6 further upstream

Table 5. Salmonid habitat evaluation for the Dock 1 and Dock 2 area.

					Dock 1 an	d Dock2	Basline	AI	ternative	Α		Iternative	В		Alternative	С
					%			%			%			%		
∐ahitat	Habitat Characteristics ¹		Calmonid Value	A	Aroa	Acros	Value X	Available		Value X	Availabl		Value X	Availabl		Value X
Habitat Riparian	8.41 Available Acres (Figure 1)		Salmonid Value		Area	Acres	Acres	Area	Acres	Acres	Area	Acres	Acres	Area	Acres	Acres
Мранан	Value metrics															
	Naturally vegetated forest, <400 ft from ACM	2	0.5	3	0%	0.00	0.00									
	and in the historic floodplain		0.65		0%	0.00										
	Invasive species present	4	0.03 N/A		076	0.00	0.00									
	Naturally vegetated, grass/shrub		0.2	3	0%	0.00	0.00									
	and associated with historic floodplain		0.35		0%	0.00										
	Invasive species present	4	N/A		070	0.00	0.00									
	• • •	5		9	11%	0.92	0.05									
	Vegetated riprap															
	Unvegetated/paved/buildings/riprap		0 Total	_	89%	7.48 8.41										
Active channel margin	1.51 Available Acres (Figure ES1)															
Active charmer margin	Value metrics															
	Sloped (<5:1 or 11°), unarmored and vegetated		1	3	0%	0.00	0.00									
	Invasive species present															
	Sloped (>5:1 or 11°), unarmored and vegetated Invasive species present		0.8	3	0%	0.00	0.00									
	Sloped (<5:1), unarmored and unvegetated		0.8		19%	0.28	0.22									
	Sloped (>5:1), unarmored and unvegetated		0.1		0%	0.00	0.00									
	Sloped (<5:1), bio-engineered		0.2		0%	0.00	0.00									
	Sloped (>5:1), bio-engineered		0.2		0%	0.00										
	Riprapped		0		73%	1.10	0.00									
	Sheetpile		0		0%	0.00										
	Pilings	6	0		0%	0.00										
	Covered structures over channel margins	7	0.1		8.2%	0.12										
			Total			1.51										
Main channel																
Shallow Water (0-10 f	t below OLW)															
	1.48 Available Acres (Figure ES1)															
	Value metrics															
	Shallow water, gravel and finer substrate		1		86%	1.27	1.27									
	Shallow water, natural rock outcrop	8	1		0%	0.00	0.00									
	Shallow water with riprap or concrete		0.1		0%	0.00	0.00									
	Shallow water with covering structures	7	0.1		14.1%	0.21	0.02									
	Shallow water with pilings	6	0	_	0%	0.00	0.00									
			Total			1.48	1.29									
Shallow Water (10-20	ft below OLW)															
	0.67 Available Acres (Figure ES1)				NA		NA									
	Value metrics															
	Shallow water, gravel and finer substrate		0.9		54%	0.36	0.32									
	Shallow water, natural rock outcrop	8	0.9		0%	0.00	0.00									

Table 5. Salmonid habitat evaluation for the Dock 1 and Dock 2 area.

	Shallow water with riprap or concrete		0.1	0%	0.00	0.00
	Shallow water with covering structures	7	0.1	46%	0.31	0.03
	Shallow water with pilings	6	0	0%	0.00	0.00
			Total		0.67	0.35
Deep water	1.52 Available Acres (Figure ES1)					
	Value metrics					
	Deep water with natural substrates		0.1	100%	1.52	0.15
	Deep water with artificial substrates		0.05	0%	0.00	0.00
			Total		1.52	0.15
Off channel	0.00 Available Acres (Figure ES1)					
	Value metrics					
	Cold" water tributary"		1	0%	0.00	0.00
	Warm" water tributary"		0.9	0%	0.00	0.00
	Side channel		1	0%	0.00	0.00
	Alcove or slough with tributary		1 7	0%	0.00	0.00
	Alcove or slough without tributary		0.8	0%	0.00	0.00
	Embayment (cove) with tributary		1 7	0%	0.00	0.00
	Embayment (cove) without tributary		0.8 8_	0%	0.00	0.00
			Total		0.00	0.00

¹ Estimates of relative habitat value herein are interim and subject to change pursuant to future revisions or amendments by NMFS in consultation with the LWG.

² ACM (active channel margin). Naturally vegetated means vegetated by native (i.e., non-invasive) species.

³ Native species. Value is 1/2 the value listed if vegetated with invasive species.

⁴ For example Himalayan blackberry

⁵ Approximately 35% of the area is dominated by invasive species and 65% of the area is comprised of mixed native and invasive species.

 $^{^{\}rm 6}$ Evaluated at 1/2 the margin type depending on the location of the pilings.

⁷ For example, docks

⁸ Cannot be created

⁹ Value is 0.9 for salmonid adults if warm" water tributary"

¹⁰ Value is around 0.6 further upstream

Table 6. Salmonid habitat evaluation for the Lot 3 area.

				Lot	3 Baselin	e	А	ternative	Α	A	lternative	В		Alternative	C C
				%			%			%			%		
H-bis-s	Habitat Chamatanistis 1	Calara aid Males		Available	A	Value X	Available		Value X	Availabl		Value X	Availab		Value X
Habitat	Habitat Characteristics ¹	Salmonid Value	2	Area	Acres	Acres	Area	Acres	Acres	Area	Acres	Acres	Area	Acres	Acres
Riparian	5.23 Available Acres (Figure 1) Value metrics														
		2 0.5	3	00/	0.00	0.00									
	Naturally vegetated forest, <400 ft from ACM	0.65		0%											
	and in the historic floodplain			0%	0.00	0.00									
	Invasive species present	IN/A													
	Naturally vegetated, grass/shrub	0.2	<u>-</u>	0%											
	and associated with historic floodplain	0.35	,	0%	0.00	0.00									
	Invasive species present	N/A													
	Vegetated riprap	0.05		10%											
	Unvegetated/paved/buildings/riprap	() _	90%	4.70	0.00									
		Tota	I		5.23	0.03									
Active channel margin	1.83 Available Acres (Figure ES1)														
	Value metrics														
	Sloped (<5:1 or 11°), unarmored and vegetated Invasive species present		l 3	0%	0.00	0.00									
	Sloped (>5:1 or 11°), unarmored and vegetated Invasive species present	3.0	3	0%	0.00	0.00									
	Sloped (<5:1), unarmored and unvegetated	3.0	₹	63%	1.16	0.93									
	Sloped (>5:1), unarmored and unvegetated	0.1		0%											
	Sloped (<5:1), bio-engineered	0.2		0%											
	Sloped (>5:1), bio-engineered	0.2		0%											
	Riprapped	(37%											
	Sheetpile	(0%											
	Pilings	6 (0%											
	Covered structures over channel margins	7 0.1		0.0%		0.0000									
	Covered structures over channel margins	Tota	-	0.0%	1.83										
Main channel															
Shallow Water (0-10 f	ft below OLW)														
	1.50 Available Acres (Figure ES1)														
	Value metrics														
	Shallow water, gravel and finer substrate	-	L	94%	1.42	1.42									
	Shallow water, natural rock outcrop	8	L	0%	0.00	0.00									
	Shallow water with riprap or concrete	0.1	L	1.5%	0.02	0.00									
	Shallow water with covering structures	7 0.1	L	2.6%	0.04	0.00									
	Shallow water with pilings	6 ()	1%	0.02	0.00									
		Tota	Ι -		1.50	1.42									
Shallow Water (10-20	ft below OLW)														
•	0.88 Available Acres (Figure ES1)			NA		NA									
	Value metrics														
	Shallow water, gravel and finer substrate	0.9)	94%	0.83	0.75									
	Shallow water, natural rock outcrop	8 0.9		0%											

Table 6. Salmonid habitat evaluation for the Lot 3 area.

	Shallow water with riprap or concrete		0.1	1%	0.00	0.00
	Shallow water with covering structures	7	0.1	5%	0.05	0.00
	Shallow water with pilings	6	0	0%	0.00	0.00
			Total		0.88	0.75
Deep water	0.94 Available Acres (Figure ES1)					
	Value metrics					
	Deep water with natural substrates		0.1	100%	0.94	0.09
	Deep water with artificial substrates		0.05	0%	0.00	0.00
			Total		0.94	0.09
Off channel	0.00 Available Acres (Figure ES1)					
	Value metrics					
	Cold" water tributary"		1	0%	0.00	0.00
	Warm" water tributary"		0.9	0%	0.00	0.00
	Side channel		1	0%	0.00	0.00
	Alcove or slough with tributary		1 7	0%	0.00	0.00
	Alcove or slough without tributary		0.8	0%	0.00	0.00
	Embayment (cove) with tributary		1 7	0%	0.00	0.00
	Embayment (cove) without tributary		0.8	0%	0.00	0.00
			Total		0.00	0.00

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² ACM (active channel margin). Naturally vegetated means vegetated by native (i.e., non-invasive) species.

³ Native species. Value is 1/2 the value listed if vegetated with invasive species.

⁴ For example Himalayan blackberry

⁵ Approximately 36% of the area is dominated by invasive species and 64% of the area is comprised of mixed native and invasive species.

 $^{^{\}rm 6}$ Evaluated at 1/2 the margin type depending on the location of the pilings.

⁷ For example, docks

⁸ Cannot be created

⁹ Value is 0.9 for salmonid adults if warm" water tributary"

¹⁰ Value is around 0.6 further upstream

Table 7. Salmonid habitat evaluation for the Lot 1 and Lot 2 area.

				Lot 1	and Lot 2	Basl	ine		ternative	Α		Alternative	В		Alternative	. C
				%				%			%			%		
Habitat	Habitat Characteristics ¹		Salmonid Value	Availabl Area	e Acres		/alue X Acres	Available Area	Acres	Value X Acres	Availab Area	le Acres	Value X Acres	Availabl Area	e Acres	Value X Acres
Riparian	8.68 Available Acres (Figure 1)		Salifiorila value	Alea	Acres		Acres	Alea	ACIES	Acres	Alea	Acres	Acres	Alea	Acres	Acres
тритип	Value metrics															
	Naturally vegetated forest, <400 ft from ACM	2	0.5	3 (1% 0.	.00	0.00									
	and in the historic floodplain		0.65			.00	0.00									
	Invasive species present	4	N/A	·	.,0		0.00									
	Naturally vegetated, grass/shrub		0.2	,	% 0	.43	0.04									
	and associated with historic floodplain		0.35			.00	0.00									
	Invasive species present	4	Yes	·	.,0		0.00									
	Vegetated riprap	5	0.05	8.0	ı% 0	.69	0.03									
	Unvegetated/paved/buildings/riprap		0	87		.55	0.00									
	omegatates, pares, salamgs, nprap		Total			.68	0.08									
Active channel margin	4.63 Available Acres (Figure ES1)															
	Value metrics															
	Sloped (<5:1 or 11°), unarmored and vegetated		1	1 1	.% 0	.05	0.02									
	Invasive species present		Yes													
	Sloped (>5:1 or 11°), unarmored and vegetated Invasive species present		0.8	,	% 0	.23	0.19									
	Sloped (<5:1), unarmored and unvegetated		0.8	81	.% 3	.74	2.99									
	Sloped (>5:1), unarmored and unvegetated		0.1	(% 0.	.00	0.00									
	Sloped (<5:1), bio-engineered		0.2	(% 0	.00	0.00									
	Sloped (>5:1), bio-engineered		0.2	(% 0	.00	0.00									
	Riprapped		0	5	% 0	.23	0.00									
	Sheetpile		0	(% 0	.00	0.00									
	Pilings	6	0	8	% 0	.39	0.00									
	Covered structures over channel margins	7	0.1	0.0	% 0	.00 (0.0000									
			Total		4	.63	3.20									
Main channel																
Shallow Water (0-10 f																
	2.03 Available Acres (Figure ES1)															
	Value metrics															
	Shallow water, gravel and finer substrate	8	1	87		.77	1.77									
	Shallow water, natural rock outcrop	۰	1			.00	0.00									
	Shallow water with riprap or concrete	7	0.1			.00	0.00									
	Shallow water with covering structures	6	0.1	0.0		.00	0.00									
	Shallow water with pilings	•	0	13		.26	0.00									
			Total		2.	.03	1.77									
Shallow Water (10-20) ft below OLW)															
	1.48 Available Acres (Figure ES1)			1	IA		NA									
	Value metrics															
	Shallow water, gravel and finer substrate		0.9	100	% 1	.48	1.33									
	Shallow water, natural rock outcrop	8	0.9	C	0.	.00	0.00									

Table 7. Salmonid habitat evaluation for the Lot 1 and Lot 2 area.

rable // balliona habi	itat evaluation for the Lot 1 and Lot 2 area.					
	Shallow water with riprap or concrete		0.1	0%	0.00	0.00
	Shallow water with covering structures	7	0.1	0%	0.00	0.00
	Shallow water with pilings	6	0	0%	0.00	0.00
			Total		1.48	1.33
Deep water	2.70 Available Acres (Figure ES1)					
	Value metrics					
	Deep water with natural substrates		0.1	100%	2.70	0.27
	Deep water with artificial substrates		0.05	0%	0.00	0.00
			Total		2.70	0.27
Off channel	0.00 Available Acres (Figure ES1)					
	Value metrics					
	Cold" water tributary"		1	0%	0.00	0.00
	Warm" water tributary"		0.9	0%	0.00	0.00
	Side channel		1	0%	0.00	0.00
	Alcove or slough with tributary		1 7	0%	0.00	0.00
	Alcove or slough without tributary		0.8	0%	0.00	0.00
	Embayment (cove) with tributary		1 7	0%	0.00	0.00
	Embayment (cove) without tributary		0.8	0%	0.00	0.00
			Total		0.00	0.00

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³ Native species. Value is 1/2 the value listed if vegetated with invasive species.

⁴ For example Himalayan blackberry

⁵ Approximately 20% of the area is dominated by invasive species and 80% of the area is comprised of mixed native and invasive species.

 $^{^{\}rm 6}$ Evaluated at 1/2 the margin type depending on the location of the pilings.

⁷ For example, docks

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